

Lieutenant Governor

State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

April 28, 2015

Lantz Indergard Lisbon Valley Mining Company LLC PO Box 400 Moab, Utah 84532

Subject:

Review of Amended Notice of Intention to Commence Large Mining Operations and Updated Centennial Pit Backfill Proposal, Lisbon Valley Mining Company LLC, Lisbon Valley Mine,

M/037/0088, San Juan County, Utah

Dear Mr. Indergard:

The Division of Oil, Gas and Mining (Division) approves the combined information included in both the Review Responses and the Centennial Pit Partial Backfilling proposal received March 19, 2015. Backfilling of the Centennial Pit may begin subject to the final approval of the BLM.

The Division has directed Lisbon Valley Mining Company (LVMC) to update and consolidate the NOI to include previous revisions and amendments into a unified document to assist the Division in conducting required periodic surety evaluations and to inspect the site. The Division understands that LVMC is in the process of updating the NOI. The updated NOI had a target date for delivery to the Division in November 2014. Given the ongoing discussions and delays in resolving the pit backfill request, the Division now directs LVMC to provide the updated and consolidated NOI (including the changes in this amendment) to be delivered by July 1, 2015, at which time the reclamation cost estimate can be evaluated for periodic escalation as required in R647-4-113.6.12.

Many of the comments in the attached review must be addressed in the revised NOI but do not affect the backfill approval. These comments are meant to help LVMC incorporate the Backfill Plan into the body of the consolidated NOI. They are listed under the applicable R647 heading. The consolidated NOI will be subject to review and approval, and the existing surety adjusted as needed based on this review.

Please use the large mine permit form, MR-LMO, available on the Division's web site for guidance. Also, please note that a permit application fee is <u>not</u> required with this submittal. After the NOI is determined technically complete, the Division will ask that you submit two clean copies of the corrected and complete Notice of Intention. Upon final approval, both copies will be stamped approved and one will be returned for your records.



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The Division will be happy to work with you to get the LMO rewritten. If you have any questions please contact Mike Bradley at 801-538-5332 or me at 801-538-5261. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker

Minerals Program Manager

PBB: mpb:mj Attachment: Review

cc: Dave Pals, BLM, Moab FO (dpals@blm.gov); Jerry Mansfield, SITLA (jmansfield@utah.gov) O:\M037-SanJuan\M0370088-LisbonValley-Summo\Final\Rev3-6526-04232015.doc

FIRST REVIEW OF AMENDED NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Lisbon Valley Mining Company Lisbon Valley Mine M/037/0088 April 28, 2015

General Comments:

Comment #	Sheet/Page/ Map/Table #	Comments	Initials
1	General	Responses to the following review comments may raise additional questions and generate subsequent comments by Division personnel. (This comment for Applicant/Operator understanding of the review process only; no response required.)	OGM
2	General	While developing the NOI, please avoid duplication where possible with text, figures and maps. In the text, use references to the figures and maps located in sonamed appendices. Construct the NOI so that it can be easily amended or revised at future dates using the procedure prescribed by the Division, including using form MR-REV as a cover sheet to replacement pages. The object is to reduce the size of the submitted NOI and reduce the work required by the operator to produce it. Include all third party documentation, reports, test results, etc., in appendices. Likewise, include copies of existing permits from UDEQ and other agencies in another appendix, either in whole or as a reference to an agency web link to the current permit.	mpb
3	General	There are no page numbers in the addendum to which to refer comments. Therefore, previous comments that are retained in this review for reference are <i>italicized</i> . When completing the NOI, please ensure that all pages are properly numbered, and subject matter is appropriate for the section of the rules being addressed.	mpb
4	General	There are several instances in the amendment where images and figures do not line up on the page correctly, such as being at the extreme bottom or edge of a page, or overlapping each other and/or lines of text. For example, the table of Beds 1-17 doesn't appear to line up with the lithologic column diagram. There are also comments below that describe instances where paragraphs end with a sentence that is started but never completed. Please conduct a thorough internal editorial review prior to submitting the NOI.	mpb
5	General	The comment responses and revised addendum were submitted together but as two stand-alone documents. The information provided in the responses should be incorporated into the text and figures of the addendum as well.	mpb

R647-4-104 - Operator Information and Surface and Mineral Ownership

Comment #	Sheet/Page/ Map/Table #	Comments	Initials
6	Section 104	Please review and update as necessary any out-of-date operator information and surface and mineral ownership information in the current NOI.	mpb

R647-4-105 - Maps, Drawings & Photographs

General Map Comments

Comment #	Sheet/Page/ Map/Table #	Comments	Initials
7	All Maps	The maps provided with the amendment are lacking geographic references. Please provide geographic coordinate references. The preferred coordinate system is UTM in NAD83 projection.	mpb
8	All Maps	Update all maps in the NOI to reflect conditions as of January 1, 2015. Include all applicable elements described in R647-4-105. Updated disturbance and reclamation maps should be provided with the annual report.	mpb

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials
9	submitted	As requested, the Centennial Pit contours were adjusted to show an ingress/egress route. However, the contours in the north part of the pit have a glitch that shows them extending across the pit to the other side.	mpb

<u>R647-4-106 – Operation Plan</u>

General Operation Comments

Comment #	Sheet/Page/ Map/Table #	Comments	Initials
10	Operation Plan, page not numbered (Page 12 of pdf)	The response regarding references to internal operation plans is understood, but please remove references to "internal documents" to which Division does not have access, or include them in the NOI.	mpb
11	Backfill Plan	The previous comments regarding compaction, settling, and final elevation of backfill material have been answered in responses to specific comments, but the	mpb

information was not included in the text of the amendment. Please summarize the information provided in the response in the text of the amendment under the heading "Final Backfill Configuration." (Refer to comment 14 below.)

106.4 - Nature of materials mined, waste and estimated tonnages

Comment #	Sheet/Page/ Map/Table #	Comments	Initial
12	Rock Characteriza tion and Handling Plans	The lithologies were shown in the lithographic diagram, but the bed identification table doesn't align with the diagram. Please correct. It is suggested that color-coding the bed identification table would be beneficial. For example, one color for the ore beds, another color for cap material, another color for acid-forming material, etc. Color coding was used for the figure titled "Example Waste Management Map," so it could be carried over to the lithologic column and bed ID table.	mpb
13	Final Backfill Configuratio n	Describe the QA/QC methodology to be used to ensure the ratio of Bed 14 to Bed 15 will be a minimum of 75%/25% respectively. This section states that there will be a minimum 75%/25% mix of beds14/15, while page 5 of the Arcadis "Updated Centennial Pit Backfill Evaluation" dated March 2014, says it is a 60/40 split. The Division interprets the more recent ratio of 75/25 to be a commitment by LVMC to this ratio, as has been discussed in meetings.	mpb
14	Final Backfill Configuratio n	This paragraph has a contradiction in that it wants an approved range of 7-75 million tons, while committing to a final backfill elevation 10 feet above the pre-mining ground water elevation of 6,200 feet. The diagram shows that it would take a minimum of 25 million tons to reach this commitment. Therefore the approved backfill range should be 25-75 million tons.	mpb
15	Rock Characteriza tion and Handling Plans	Discuss Bed 15 MWMP and ABA results in the context of Rock Type 7 (Beds 14 and 15) characterization, for which MWMP and ABA results suggest that the material is acid neutralizing. Related comment: It appears that Beds 14 and 15 should be classified as two different rock types, such as 7 and 7a.	pnb mpb
16	Backfill Characteris tics, Testing Overview	The last bulleted item in the Testing Overview section of Backfill Characteristics is incomplete. Please finish the thought.	pnb/ mpb
17	Multiple Extraction MWMP Testing Results	The bulleted discussion of the fluoride values for Bed 15 is incomplete, or else part of the subsequent paragraph should be included in the bullet.	pnb
18	Saturated Column Testing	A brief discussion of field sampling methodology should be included, including general sources of sampled material and compositing. Please provide a description of the ratio of Bed 14 and Bed 15 material in the composite samples used for kinetic testing.	pnb

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19	Saturated Column Testing	The results of saturated column testing should be referenced and briefly summarized.	pnb
20	Mineralogy	The second paragraph of the section is incomplete.	pnb

R647-4-109 - Impact Assessment

109.1 - Impacts to surface & groundwater systems

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Comment #	Sheet/Page/ Map/Table #	Comments	Initials
21	Impact Assessment	Typo correction needed: The response provided says, "in each case the entire pit is backfilled about the 6190' elevation," The Division believes this should state "above the 6190' elevation,"	mpb
22	Impact Assessment	Report the anticipated impacts to water quality in both aquifers resulting from the groundwater flowing through backfill, considering saturated column testing and other results.	pnb

<u>R647-4-113 - Surety</u>

Comment #	Sheet/Page/ Map/Table #	Comments	Initials
23		The reclamation cost estimate is to be recalculated based on the updated NOI due July 1, 2015.	mpb